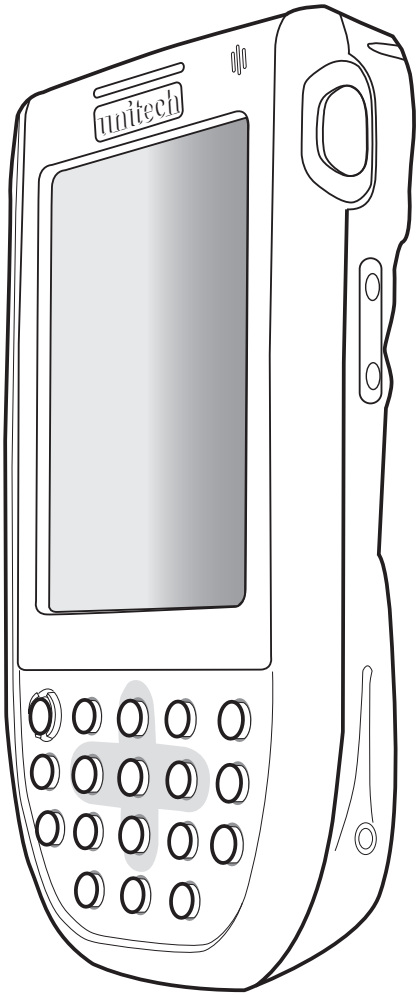
unitech

PA600 Mobile Clinical Assistant

- PA600 MCA -



User's Manual

400744G Version 1.0

About This Manual

This manual explains how to install, operate and maintain the PA600 MCA.

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Regulatory Compliance Statements

FCC Warning Statement

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

1. This Transmitter must not be co-located or operating in conjunction with any other antenna or transmitter.
2. This equipment complies with FCC RF radiation exposure limits set forth for an uncontrolled environment. To maintain compliance with FCC RF exposure compliance requirements, avoid direct contact to the transmitting antenna during transmitting.
3. Any changes or modifications (including the antennas) made to this device that are not expressly approved by the manufacturer may void the user's authority to operate the equipment.

FCC Label Statement

This device complies with part 15 of the FCC rules. Operation is subject to the following two conditions:

1. This device may not cause harmful interference, and
2. This device must accept any interference received, including interference that may cause undesired operation.

Canadian Compliance Statement

This Class B Digital apparatus meets all requirements of the Canadian Interference-Causing Equipment Regulations.

Cet appareil numerique de la classe B respecte les exigences du Reglement sur le material broilleur du Canada.

European Conformity Statement

Declaration of Conformity with Regard to the R&TTE 1999/5/EC and EMC 89/336/EEC directives.

RoHS Statement

unitech Green Product

This device conforms to RoHS (Reduction Of Hazardous Substances) European Union regulations that set maximum concentration limits on hazardous materials used in electrical and electronic equipment.

Taiwan NCC Warning Statement

交通部電信總局 低功率電波輻射性電機管理辦法（930322）

根據交通部 低功率管理辦法 規定：

第十二條　經型式認證合格之低功率射頻電機，非經許可，公司、商號或使用者均不得擅自變更頻率、加大功率或變更原設計之特性及功能。

第十四條　低功率射頻電機之使用不得影響飛航安全及干擾合法通信；經發現有干擾現象時，應立即停用，並改善至無干擾時方得繼續使用。前項合法通信，指依電信法規定作業之無線電通信。
低功率射頻電機須忍受合法通信或工業、科學及醫療用電波輻射性電機設備之干擾。

Battery Notices

The PA600 is equipped with a Lithium-Ion battery pack and backup battery. Both batteries will discharge after an extended period of not being used.

When both batteries are discharged, recharge the unit for 16 hours in order to fully charge the main battery and backup battery. Recharge the PA600 through the following:

1. Plug the USB charging cable to the PA600 and plug the 5V/3A AC-DC adapter to the power jack of the USB charging cable.
2. Place the PA600 into the docking station and plug the 5V/3A AC-DC adapter to the power jack of the docking station.

If the main battery is removed, the backup battery ensures the data on SDRAM is safe for up to 6 hours. To prevent data loss, do not leave the PA600 uncharged with the main battery removed for an extended period. *See Charging the Battery* on page 8 for more details.

NOTE: Rechargeable batteries are advised to replace every year or when 500 charge/discharge cycles achieved to guarantee optimal performance. It is normal that the battery balloons or expands beyond one year or the maximum of 500 cycles. Although it does not cause harm, it can not be used again and must be disposed of according to the location's safe battery disposal procedures.
If the performance decrease of greater than 20% in a Lithium-Ion battery, the battery is at the end of its life cycle. Do not continue to use, and ensure the battery is disposed of properly.

The length of time that a battery power lasts depends on the battery type and how the device is used. Conserve the battery life through the following:

- Avoid frequent full discharges because this places additional strain on the battery. Several partial discharges with frequent recharges are better than a deep one. Recharging a partially charged lithium-Ion battery does not cause harm because there is no memory.
- Keep the lithium-Ion battery cool. Avoid a hot car. For prolonged storage, keep the battery at a 40% charge level.
- Do not leave the lithium-Ion battery discharged and unused for an extended period because the battery will wear out and the longevity of the battery will be at least shorter than half of the one with frequent recharges.

Battery charge notice

It is important to consider the environment temperature whenever the Lithium-Ion battery pack is charged. Charging is most efficient at normal room temperature or in a slightly cooler environment. It is essential that batteries are charged within the stated range of 10°C to 45°C. Charging batteries outside of the specified range could damage the batteries and shorten their charging life cycle.

CAUTION! Do not charge batteries at a temperature lower than 0°C, which will increase the internal resistance to cause heat and make the batteries unstable and unsafe. Please use a battery temperature detecting device for a charger to ensure a safe charging temperature range.

Storage and safety notice

Although charged Lithium-Ion batteries may be left unused for several months, their capacity may be depleted due to build up of internal resistance. If this happens they will require recharging prior to use. Lithium-Ion batteries may be stored at temperatures between -20°C to 60°C, however they may deplete more rapidly at the higher temperature ranges. It is recommended to store batteries within normal room temperature ranges.

Warranty

The following items covered under Unitech Limited Warranty are free from defects during normal use:

- PA600 – 1-year limited warranty.
- Lithium-Ion battery – 6-month limited warranty.

Warranty becomes void if equipment is modified, improperly installed or used, damaged by accident or neglect, or if any parts are improperly installed or replaced by the user.

Use only the adapter supplied. Using the wrong adapter may damage the unit and will void the warranty.

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Chapter 1

Getting Started

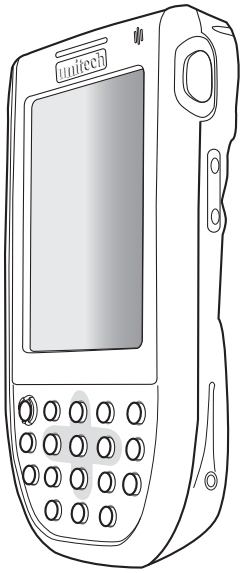
Introducing the PA600

Thank you for purchasing the PA600 Mobile Clinical Assistant.

Your PA600 was designed for users who need a compact and durable PDA for data collection and real time transactions.

The PA600 is a rugged, compact and lightweight palm-size computer using the Windows Mobile 6.1 operating system, and incorporating an integral bar code scanning laser device, RFID HF reader, color LCD with touchscreen, keypad, and wireless communication capability. It provides users with a standard Windows-based environment for customizing and operating the device.

To reduce TCO, the PA600 is sealed to meet IP64 standards and has undergone multiple drop tests to prevent downtime.



Features

Powerful system

- Microsoft Windows Mobile 6.1 operating system
- Intel PXA270 processor with speed of up to 520 MHz

System memory

- 128 MB SDRAM
- 376 MB Flash ROM

Display

- 3.5-inch QVGA LCD touch-sensitive screen
- 240 x 320 resolution

Barcode scanner

- Built-in 2D imager
- Built-in vibrator for scanning indication

RFID HF reader

- Built-in RFID HF reader
- HF 13.56MHz supports ISO 15693, ISO 14443A/B

Communication

- USB Host & Client
- 802.11b/g
- Bluetooth version 1.2 Class 2 (supports Bluetooth Printer, Bluetooth Modem, Bluetooth ActiveSync)

Audio

- MIC
- Speaker
- Headset Connector
- Receiver

Wireless connectivity

- IEEE 802.11b/g
- Bluetooth wireless technology

Expansion slot

- Accommodates Secure Digital (SD) memory cards and can serve as a SDIO port.

Battery system

- 3.7V 2200mAH Li-ion battery pack
- Charging time: under 5 hours
- Embedded backup battery cell

User-friendly interface

- Quick launch hot keys for enabling backlight, calibration, software keyboard, and other device management tasks
- Trigger keys for barcode scanning
- Anti-microbial casing

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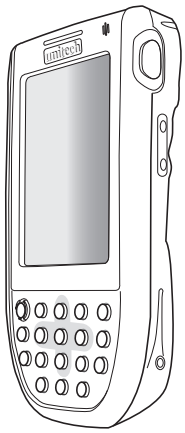
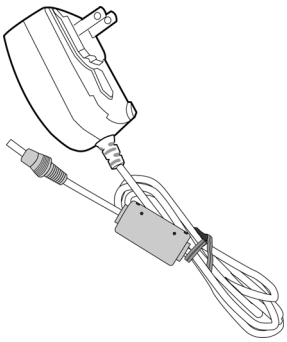
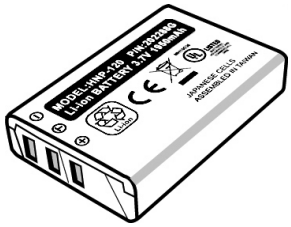
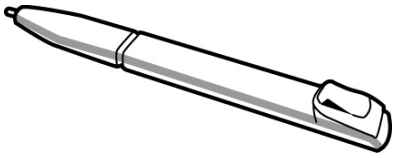
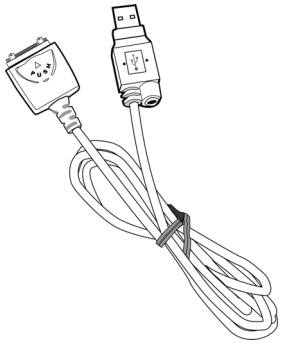
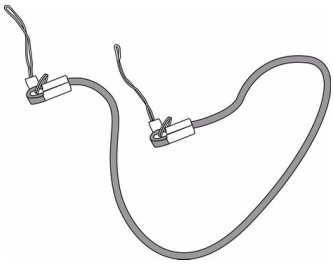
Package Contents

After opening the box, ensure the following accessories for the PA600 are present:

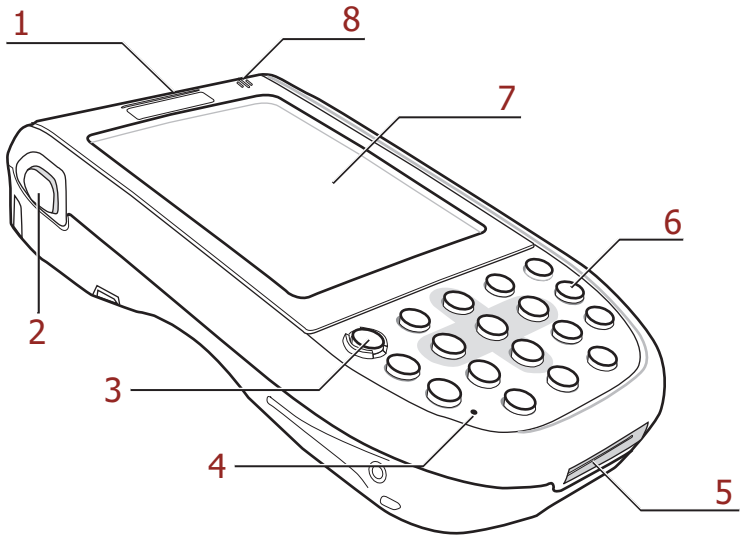
<table>
<tr><td>  </td><td>  </td></tr>
<tr><td>PA600 Terminal</td><td>AC Adapter with universal plugs</td></tr>
<tr><td>  </td><td>  </td></tr>
<tr><td>Battery Pack</td><td>Stylus</td></tr>
<tr><td>  </td><td>  </td><td> </td></tr>
<tr><td>USB Charging Cables</td><td>Elastic Stylus String</td><td>CD-ROM</td></tr>
</table>

If anything is missing or appear damaged in any way, contact your dealer.

A Tour of the PA600

The following sections describe the main components and features of the PA600.

Front Left View



No.	Component	Description
1.	Status indicator	Indicates the battery charging and barcode scanning status. **Green** - Battery is fully charged or barcode scanning process is completed without error. **Red** - Battery is charging, barcode scanner is fired/ activated.
2.	Left scanner trigger button	Press to activate the 2D imager.
3.	Power button	If the device is off, press this button to turn it on. Alternatively, when the unit is on, this key must be pressed and held down for about three seconds in order to turn the device off.
4.	Microphone	Enables you to record voice audio.
5.	Universal connector	Connects your device to a USB charging/ communication cable. This USB cable connects to the computer's USB port and accepts the 5V AC adapter to provide power to the PA600. *See Charging the Battery* on page 8 for further instructions. The unit can simultaneously recharge and perform an ActiveSync operation. You can also use it to connect peripheral hardware, such as a docking station, to your device. This port can also support USB and RS232 hosting for devices such as a USB or RS232 scanner, keyboard, or USB memory key.
6.	Keypad	Keypad interface for controlling the PA600. See *Keypads and Function Buttons* on page 14 for more information.

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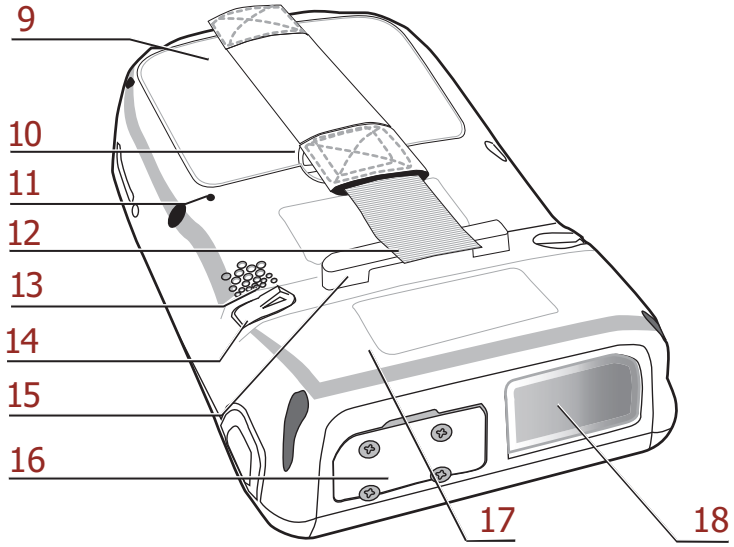
7.	LCD touch screen	Displays the applications and data stored on your device. It is touch-sensitive and responds to the stylus or finger.
8.	Speaker	Enables you to hear audio from PA600.

Back View



No.	Component	Description
9.	Battery compartment	Houses the removable and rechargeable 3.7 V, 2200 mAh battery pack
10.	Battery compartment release latch	Opens the battery compartment.
11.	Reset button	Press the end of the stylus into the button to reset your device.
12.	Handstrap	Enables you to securely hold PA600 while using it.
13.	Speaker	Enables you to hear audio from PA600.
14.	Stylus	Enables you to interact with the operating system. To use the stylus, remove it from its holder and hold it the same way as you hold a pen or pencil.
15.	Strap holder	Attachment location for holding hand strap, carrying strap, and stylus.
16.	Memory card slot	Accommodates Secure Digital (SD) memory cards and can serve as a SDIO port.
17.	Barcode scanner window	Scan barcodes window where the laser pass through.
18.	RFID antenna	Enables you to receive the radio frequency signals.

Getting Started

This section explains how to install and charge the battery, how to check battery status, how to turn on the PA600, and how to calibrate the screen.

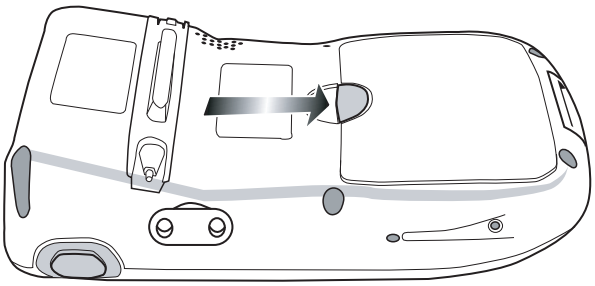
Installing the Battery

WARNING! There is a risk of fire and burns if the battery pack is handled improperly. DO NOT disassemble, crush, puncture, short external contacts, or dispose the battery pack in fire or water. DO NOT attempt to open or service the battery pack. Dispose of used batteries according to local recycling guidelines in your area.

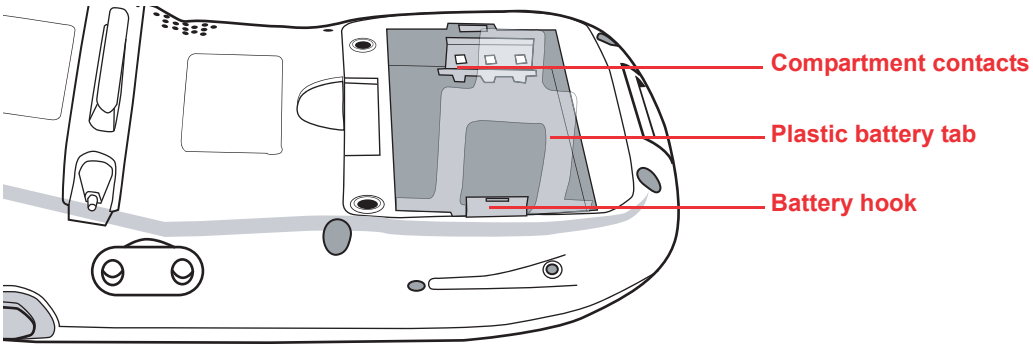
A backup battery cell is embedded into your device to prevent data loss in instances when the removable battery pack is removed or completely discharged. The backup battery will keep the data and system setting for up to 6 hours if the main battery is removed.

NOTE: To enable the internal battery cell to provide backup power supply, charge your device with the main battery pack for at least 16 hours.

1. Open the battery compartment by pushing the latch in the direction of the arrow and lifting up.



The battery compartment is displayed:



NOTE: The plastic battery tab makes it easy to remove the battery.

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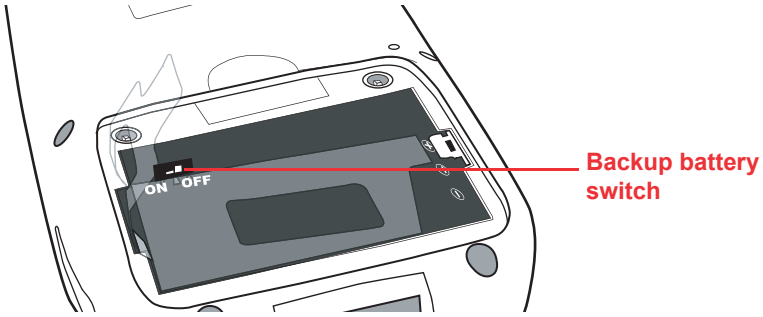
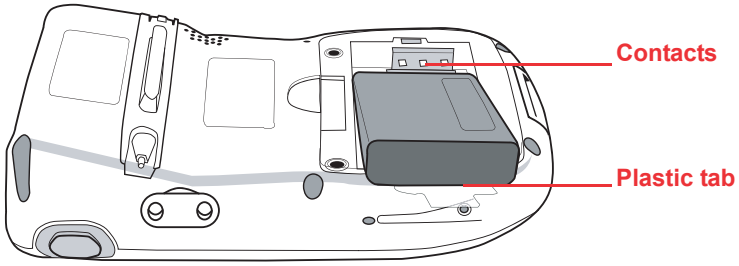
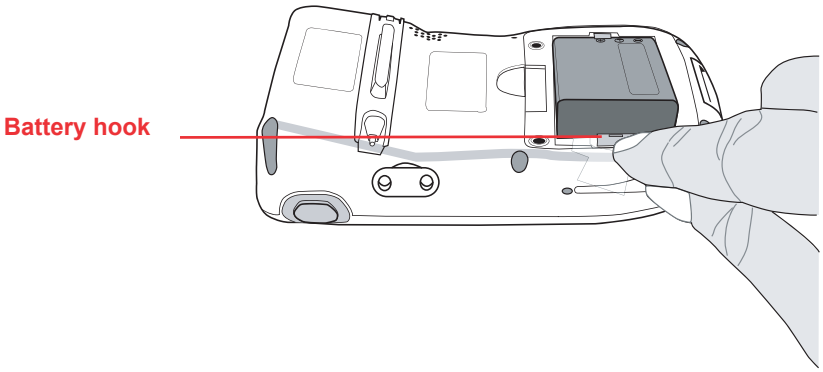
2. Locate the backup battery switch and turn it on.



3. Position the battery pack, making sure the battery contacts are aligned with the contacts in the compartment and the battery is placed on top of the plastic tab, as shown in the following illustration.



4. Slide the battery pack into the battery bay while simultaneously pulling the battery hook until the battery clicks into place.



5. Replace the battery compartment cover.

Charging the Battery

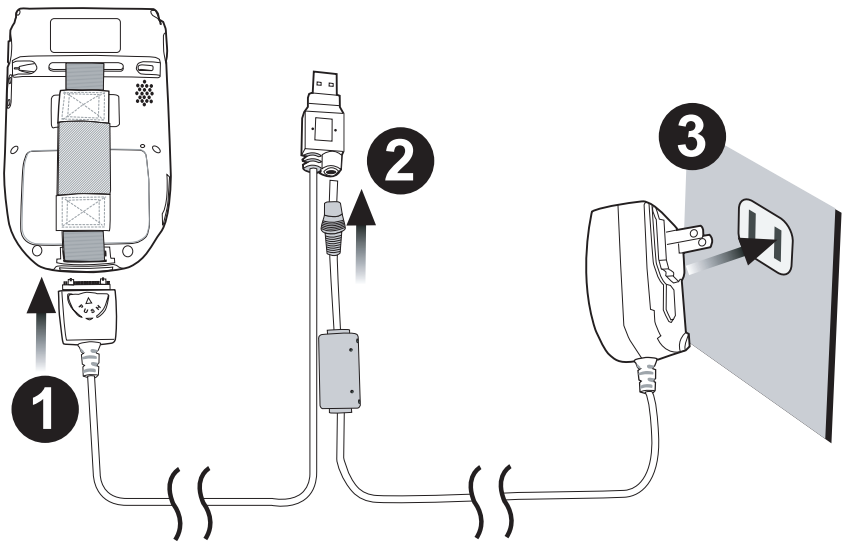
Before using the PA600 for the first time, you need to charge it for about 16 hours. After that, you can charge the PA600 within 5 hours to recharge the battery to full capacity. Charge the PA600 using the USB charging cable or the docking station.

CAUTION! Operating the PA600 for the first time without the AC adapter, and without fully charging the backup battery may result in loss of data stored in RAM memory. When the main battery is removed, the backup battery retains RAM data in memory for 2 hours, please charge the battery for the period to avoid the data loss in RAM memory.

NOTE: Turn the backup battery switch on before charging the battery. Data you entered may not be properly stored until the built-in backup battery has been adequately charged.

Charging the Battery using the USB Cable

1. Press and hold the connector button on the USB charging cable and connect it to the PA600 (**1**).
2. Plug the AC adapter cable into the power jack on the USB charging cable (**2**).
3. Connect the AC adapter into an electrical outlet (**3**).



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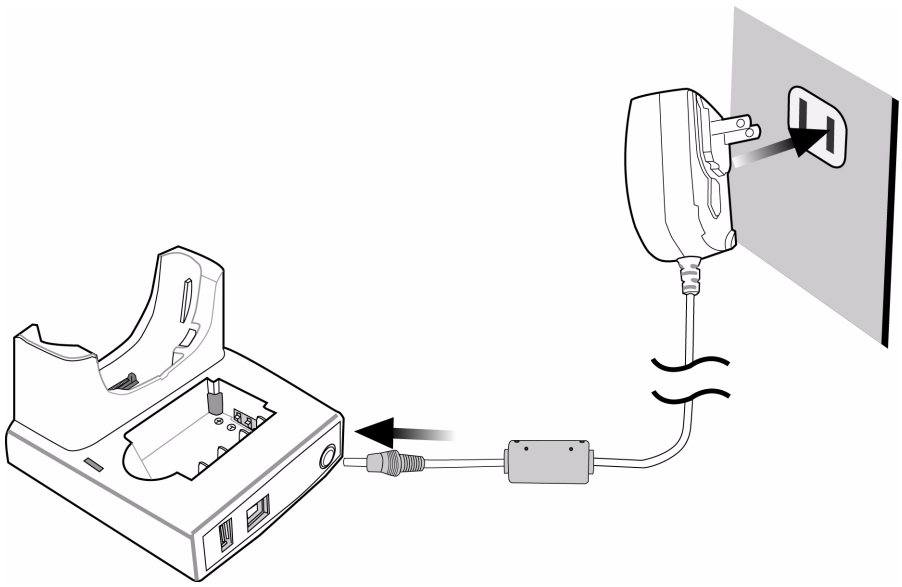
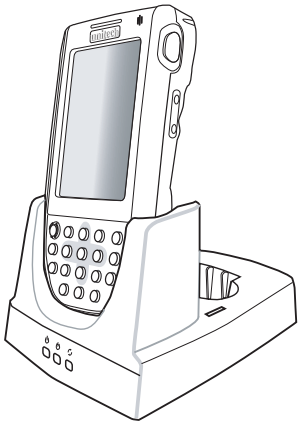
Charging the Battery with the Docking Station

1. Plug the AC adapter cable into the power jack on the docking station, then connect the AC adapter into an electrical outlet.



2. Slide the device into the docking station until it clicks into place.



3. The connection is secure when the bottom edge of the device is aligned with the docking station, and the LED indicator on the device lights up red.

LED Status

	LED	Meaning
PA600	Solid Red	Charging
	Solid Green	Charging complete
Docking Station	Power LED	Power is on
	Charging LED:	Charging (For spare battery only)
	Sync LED	Synchronization is taking place

Checking the Battery Status

If the battery level becomes low in the course of normal use, a status icon appears on the device screen indicating low or very low battery status. In both cases, perform an ActiveSync operation to back up your data, then recharge your device as soon as possible.

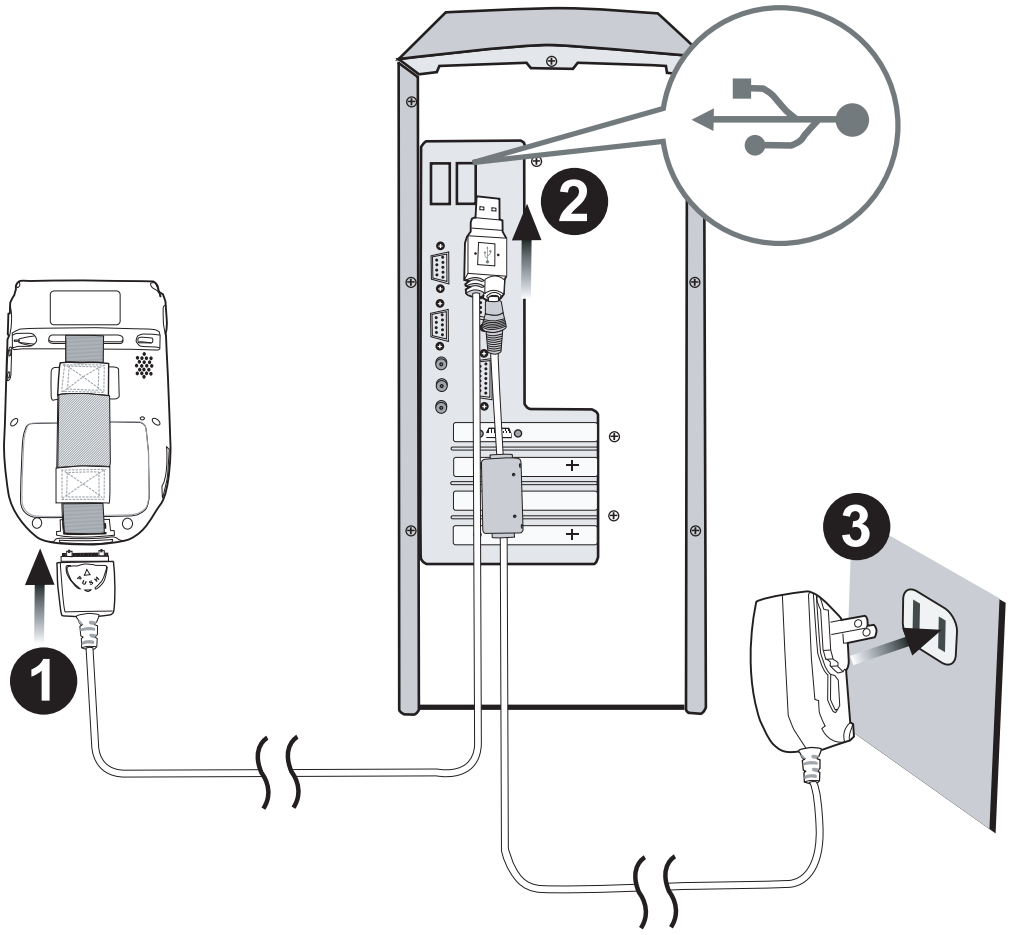
If the battery level reaches a low status, the device will enter sleep mode and cannot be powered up until the battery is charged.

Connecting the PA600 to a PC

Use the USB cable to connect the PA600 to a PC, in order to use with ActiveSync.

NOTE: To avoid low battery situation while synchronizing, you should connect the power supply.

1. Press and hold the connector button on the USB charging cable and connect it to the PA600 (**1**).
2. Plug the USB connector into the USB port on the PC and connect the AC adapter into the USB connector (**2**).
3. Connect the AC adapter into an electrical outlet (**3**).



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Turning PA600 on for the First Time

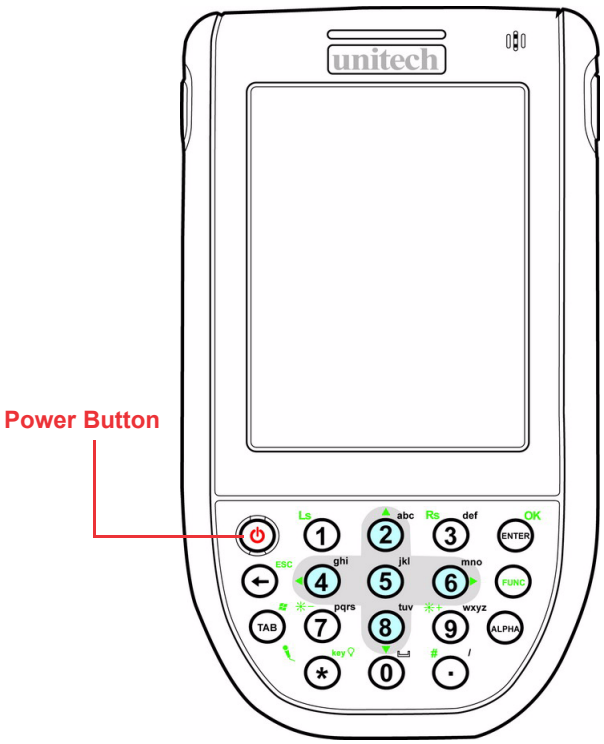
After you have initially charged your device for about 16 hours, the device is ready to be used. You can now start up your device where you'll calibrate the display, learn some basic stylus usage, and set up the system time zone, date and time.

Powering On

1. Turn on your device by pressing the power button on the front panel.

NOTE: PA600 screen ships with a protective plastic film. You may remove this if desired by peeling from one corner. The screen will be more susceptible to scratching without the film, but will be more readable.

2. The unitech PA600 welcome screen appears for a moment followed by the Windows Mobile screen.

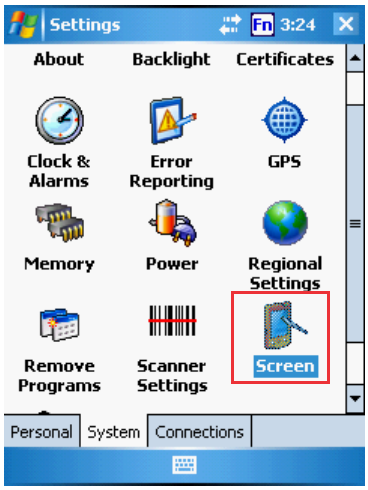


Calibrating the PA600 Screen

The calibration screen automatically appears when the unit is powered-on for the first time or after the system is reset.

To calibrate the screen at any time, follow these instructions.

1. Tap **Start** → **Settings**, and then switch to **System** tab.
2. Tap the **Screen** icon.

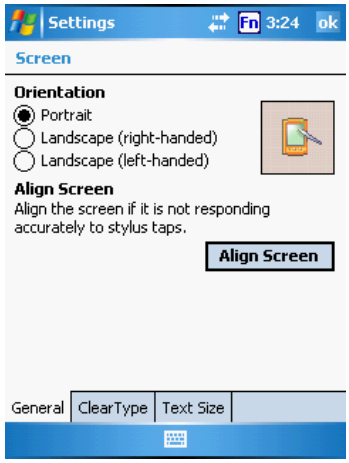


Or

Press Func key and ESC key simultaneously.

The Screen Settings window appears.

This window enables you to customize the screen settings.



3. Tap **Align Screen** to calibrate the screen.
   The align screen window appears.
4. Tap the cross hair firmly and accurately.

align screen
Tap the target firmly and accurately at each location on the screen. The target will continue to move until the screen is aligned.

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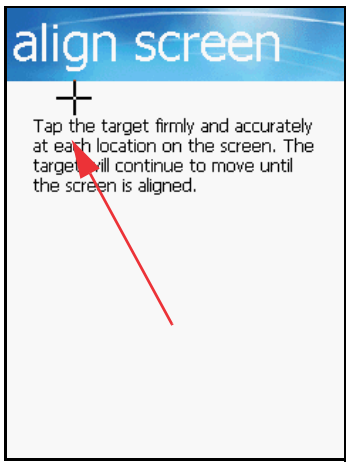
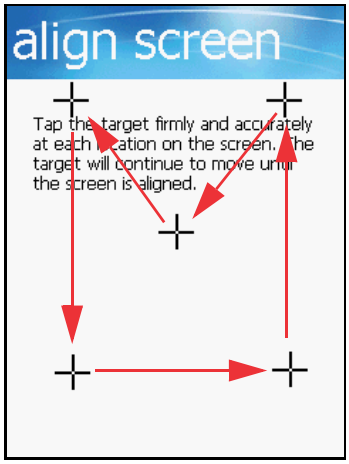
The cross hair moves to the next location.


align screen
Tap the target firmly and accurately at each location on the screen. The target will continue to move until the screen is aligned.

5. Continue tapping the cross hairs until the screen has been calibrated.



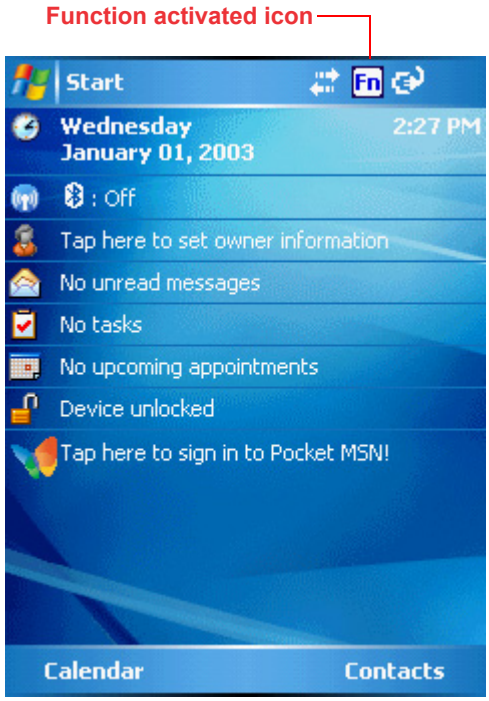
Chapter 2

Using the Hardware

Keypads and Function Buttons

The keypad enables you to both enter information and interact with the PDA operating system and also operate secondary functions using the function button. When the green function button is pressed, the green icon functions on the keypad become available.

When the Function button FUNC is pressed, an icon appears in the operating system:



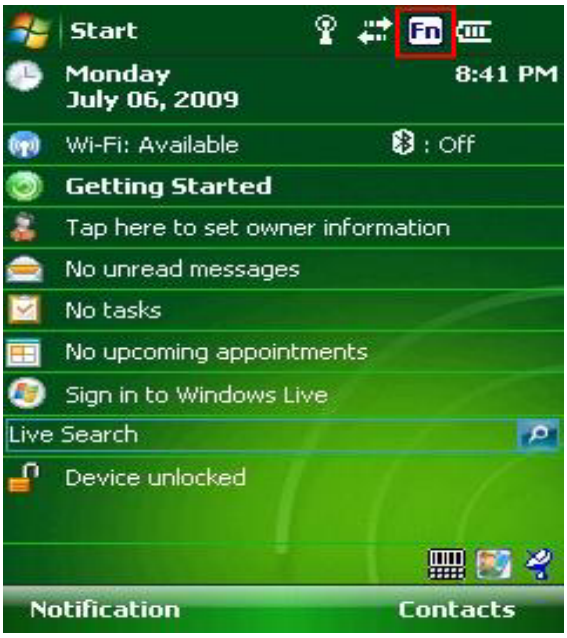
The following table describes the keypad keys.

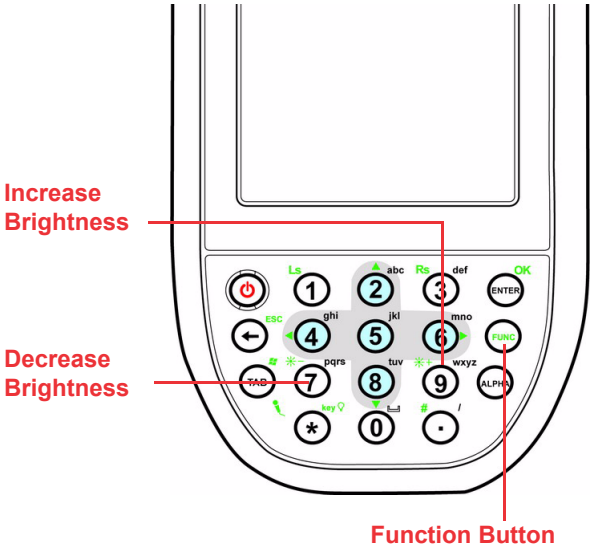
Key	Main Function	Secondary Function
	Turns the PA600 on and off.	—
	Number 1	
	Alphanumeric 2, a, b, c	Up navigation key

Key	Main Function	Secondary Function
	Alphanumeric 3, d, e, f	
	Enter key	OK
	Back space	Escape key
	Alphanumeric 4, g, h, i	Left navigation key
	Alphanumeric 5, j, k, l	—
	Alphanumeric 6, m, n, o	Right navigation key
	—	Enables/disables secondary function keys
	Tab	Windows key opens Start menu
	Alphanumeric 7, p, q, r, s	Decreases screen brightness
	Alphanumeric 8, t, u, v	Down navigation key
	Alphanumeric 9, w, x, y, z	Increases screen brightness
	Alpha	—
	Asterisk	Illuminates keypad
	Number 0, space	—
	Period	Pound, Slash

Adjusting the Screen Brightness

Press the Function button first to enable the soft keys. Then, when the function icon appears at the upper right corner of the screen, press the 7 (decrease brightness) or 9 (increase brightness) buttons to adjust the screen brightness

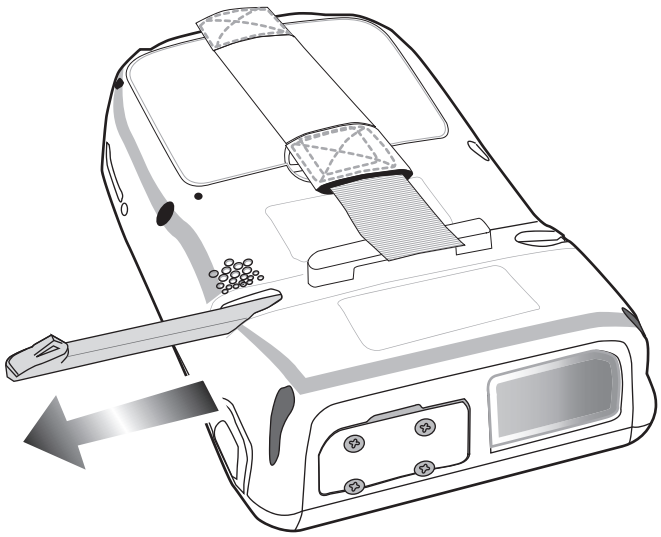




Using the Stylus

CAUTION! Never use anything other than the PA600 stylus on the screen. Otherwise this could cause a permanent damage.

1. Remove the stylus from its holder.



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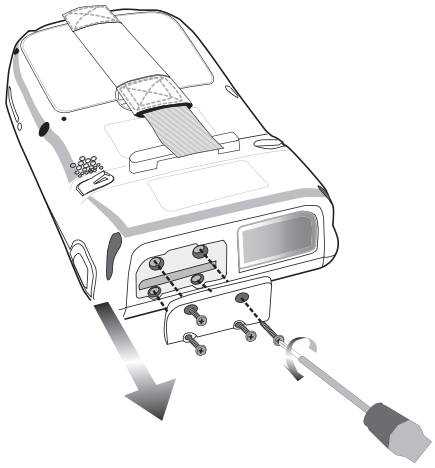
2. Hold the stylus as you hold a pencil.
3. To make a choice from a menu, lightly tap the tip of the stylus on that choice.
4. To write data into a field on a form, use the stylus to print the letters or numbers. Use very light pressure.

Using the SD/MMC memory card

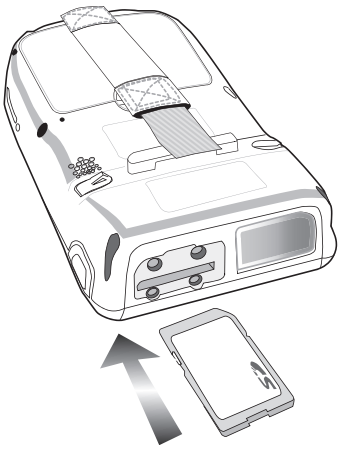
Your device has an expansion slot compatible with a range of SD and MMC storage cards, which are primarily used to back up or transfer files and data. The slot also supports SDIO cards for added connectivity options.

Inserting a Storage Card

1. Remove the four screws from the SD compartment cover and remove the cover.



2. Insert the SD card with the notched corner as shown by the icon on the case.



3. Replace the SD compartment cover and the four compartment screws.

Removing a Storage Card

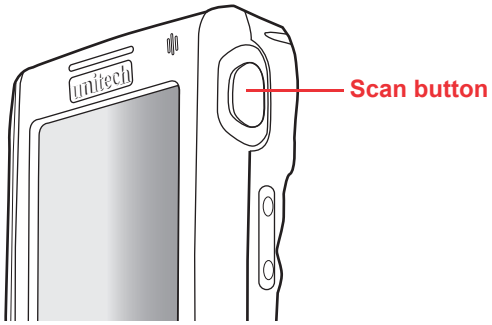
1. Remove the four screws from the SD compartment cover and remove the cover.
2. Press the card in and release. The card pops out.
3. Remove the card from the slot.
4. Replace the SD compartment cover and the four compartment screws.

Using the 2D Imager

The PA600 has an integrated 2D Imager which reads all major bar code labels with excellent performance.

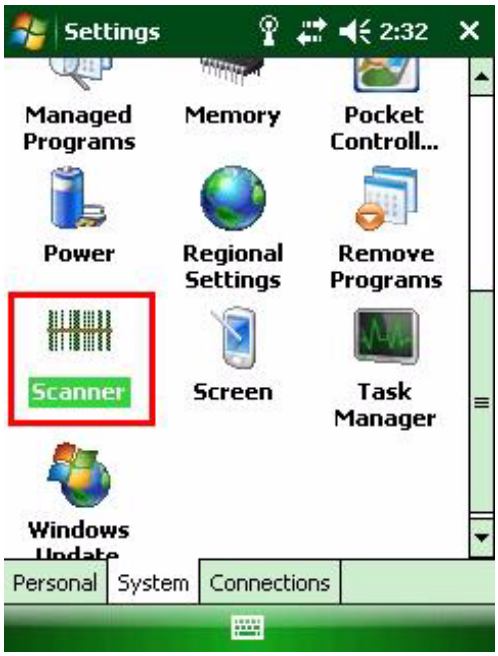
NOTE: Scanning software must be enabled in order to operate the scanner. This can be a user-loaded application or a pre-loaded utility such as Scanner Setting or Scan2Key.

Activate the 2D Imager by pressing either one of the trigger keys located on the left and right side of the unit.



The PA600 has a built-in Scanner Setting utility that allows you to test the device's barcode scan function.

1. To launch Scanner Settings, tap **Start** → **Settings** → **System** → **Scanner Settings**.



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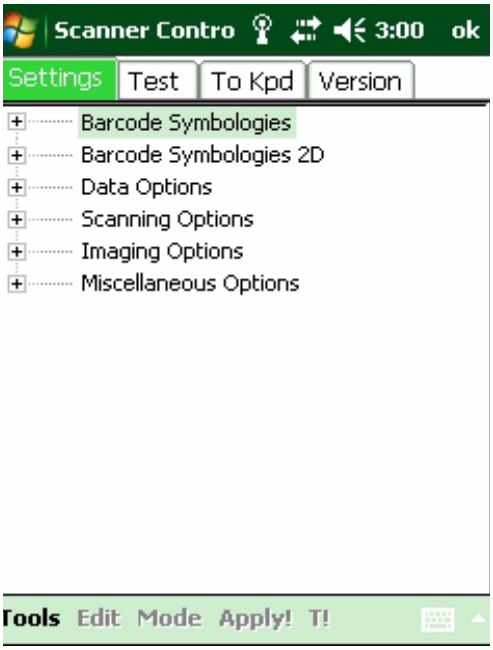
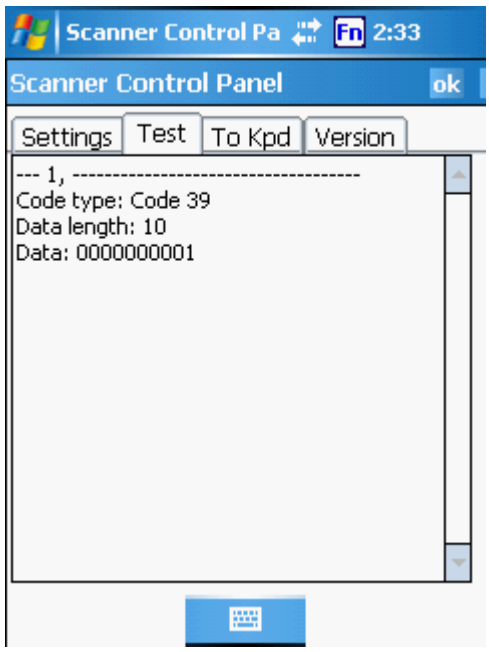
2. The Scanner Control Panel opens.



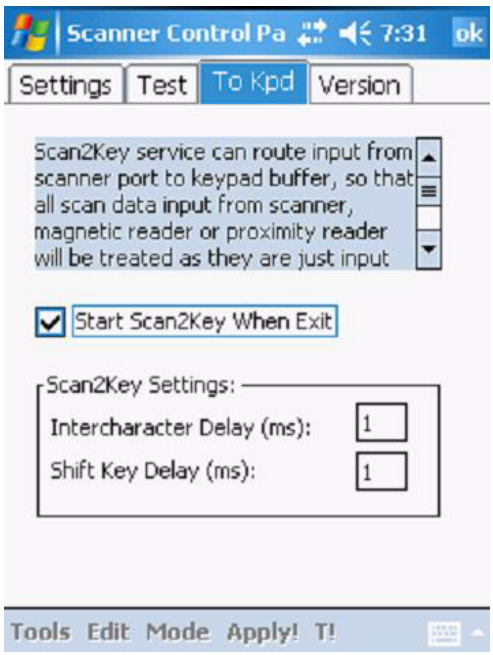
From here you can configure barcode scanner parameters such as enabling or disabling barcode symbologies, setting data transmission options, configuring magnetic and proximity reading options, and setting power management options.

3. To test the barcode scanner, tap the Test tab
4. Tap **Tools**.
5. Tap **Enable Scan**
6. To perform auto scan,tap **Tools --> Auto Scan --> Start auto-scan**.
7. Choose Interval: 3 secs
8. Tap **Start**
9. Laser scan every 3 seconds and barcode is scanned automatically.
10. Tap **Tools --> Auto-Scan --> Stop AutoScan**.



11. To enable the scanner outside of the test tab, user must enable **Scan2Key.exe**.This can be done via the **To Kpd** tab.

12. Check the box labeled “**Start Scan2Key When Exit** and tap **OK** at the top right. The scanner will be enabled and scans will be directed to the keyboard buffer.


Scanner Control Pa
7:31
ok
Settings
Test
To Kpd
Version
Scan2Key service can route input from scanner port to keypad buffer, so that all scan data input from scanner, magnetic reader or proximity reader will be treated as they are just input
Start Scan2Key When Exit
Scan2Key Settings:
Intercharacter Delay (ms):
1
Shift Key Delay (ms):
1
Tools Edit Mode Apply! T!

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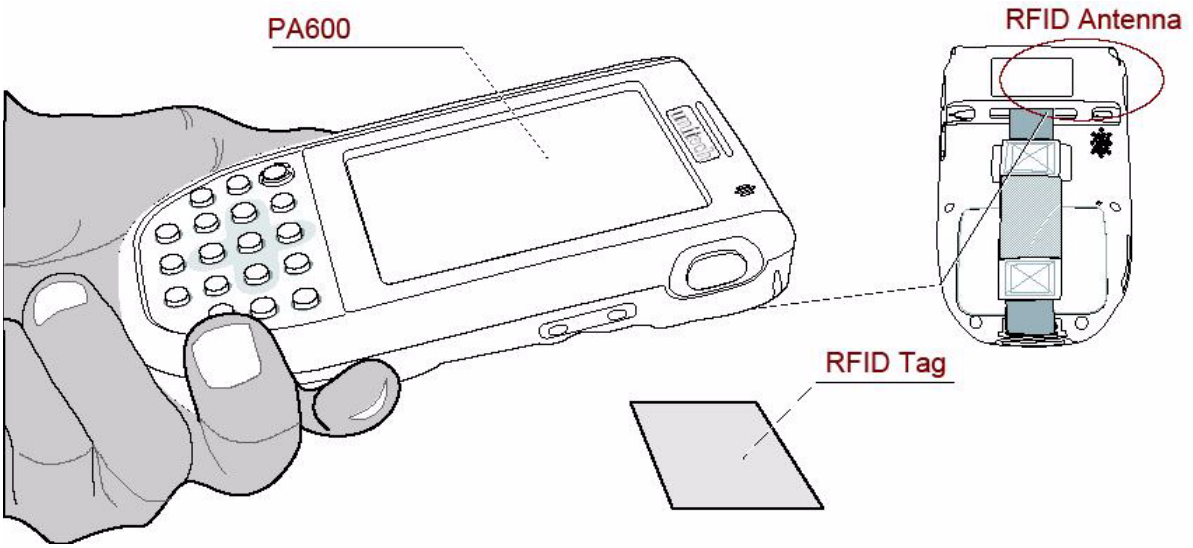
Using the RFID HF Reader

The device has a built-in RFID HF Reader allowing you to read various types of RFID Cards. The scanning area is shown as the illustration.



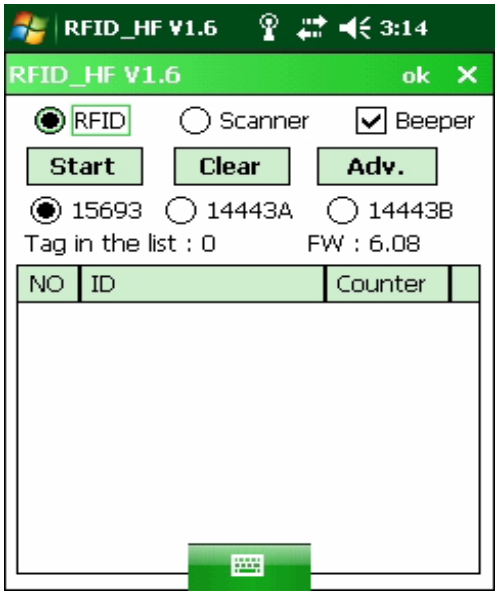
Locate the scanning area and bring an RFID tag close to the RFID antenna, allowing the device to read a tag.

The RFID demo program is pre-installed in PA600.

To launch the RFID demo program:

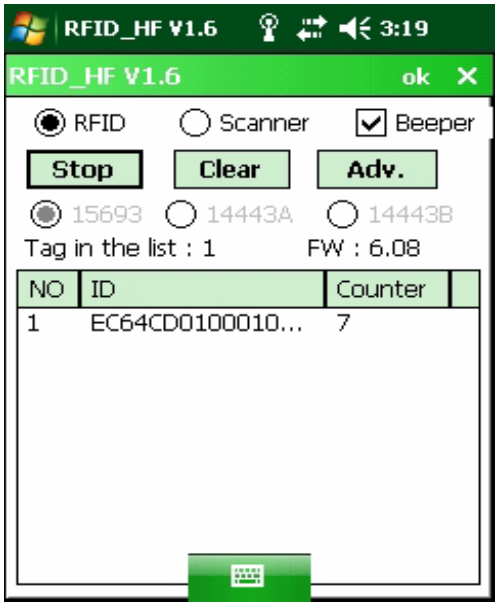
1. Tap **Start** → **Programs** → **RFID_HF**

2. Select a card type 15693, 14443A, or 14443B. Tap **Start** to activate the RFID reader.



3. Bring a tag close to the RFID antenna. The tag is read into the field.

   Check Beeper to enable beep sound when reading tags. Check Inventory to limit a tag being read once only.



4. Tap **Stop** to stop reading tags.

Chapter 3

Getting Connected

Establishing Device-PC Connection

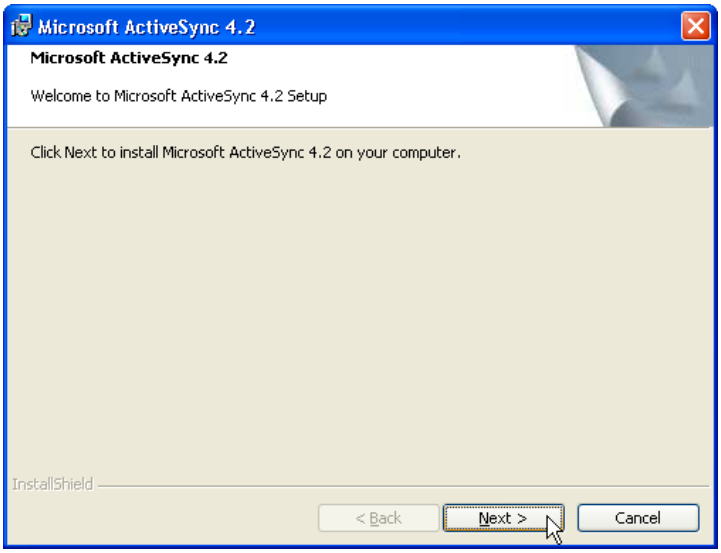
Installing Microsoft ActiveSync

In order to exchange data between your computer and PA600, Microsoft ActiveSync must be installed on your computer. Use the USB charging cable that comes with your device to connect the device to your computer.

NOTE: If you have a previous version of the Microsoft ActiveSync installed in your computer, uninstall it first before installing the latest version of Microsoft ActiveSync.

To install Microsoft ActiveSync on your computer:

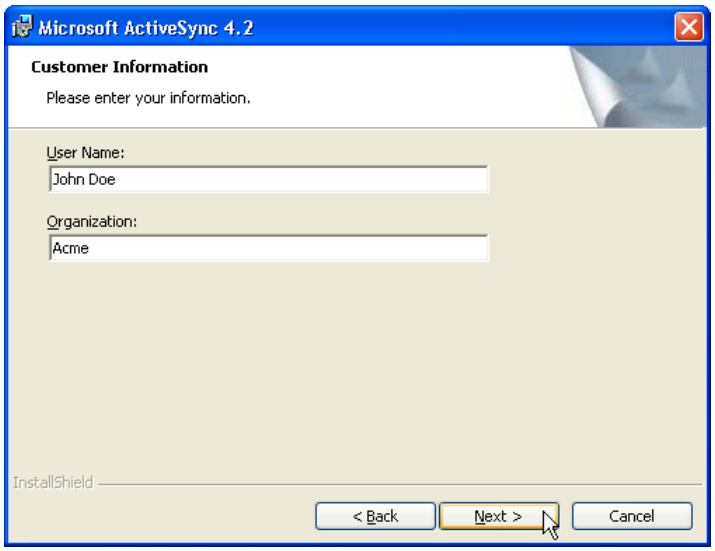
1. Close any open programs, including those that run at startup, and disable any virus-scanning software.
2. Download the ActiveSync software from the Microsoft ActiveSync Download page at link below.
   http://www.microsoft.com/windowsmobile/en-us/help/synchronize/activesync45.mspx.
3. Browse the location of the downloaded file, and double-click it.
   The installation wizard begins.


Microsoft ActiveSync 4.2
Microsoft ActiveSync 4.2
Welcome to Microsoft ActiveSync 4.2 Setup
Click Next to install Microsoft ActiveSync 4.2 on your computer.
InstallShield
< Back
Next >
Cancel

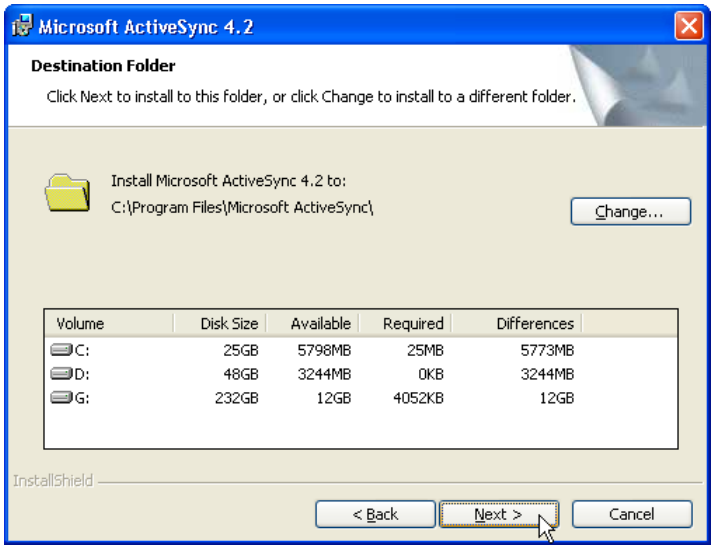
4. Click **Next**.
   You are prompted to read the End User License Agreement (EULA).

Microsoft ActiveSync 4.2
License Agreement
Please read the following license agreement carefully.
MICROSOFT SOFTWARE LICENSE TERMS
MICROSOFT ACTIVESYNC 4.2
These license terms are an agreement between Microsoft Corporation (or based on where you live, one of its affiliates) and you. Please read them. They apply to the software named above, which includes the media on which you received it, if any. The terms also apply to any Microsoft
I accept the terms in the license agreement
I do not accept the terms in the license agreement
Print
InstallShield
< Back
Next >
Cancel

5. Accept the license agreement terms and click **Next**.
   You are prompted for user information.



6. Type the user name and organization and click **Next**.
   You are prompted for the destination folder.



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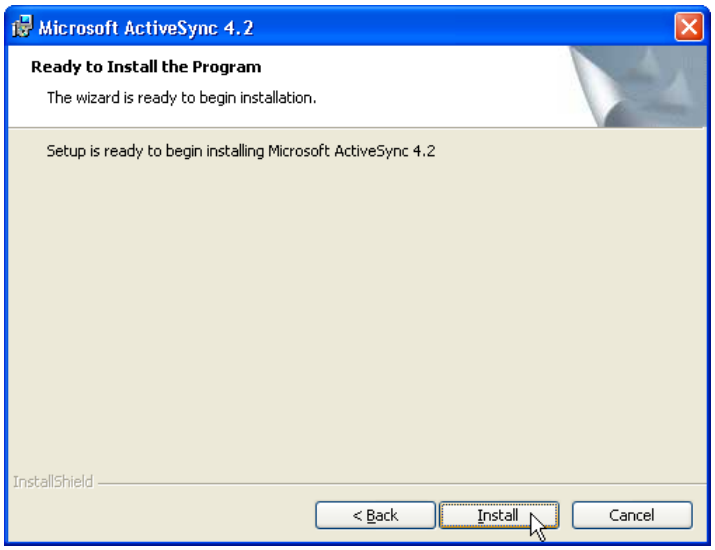
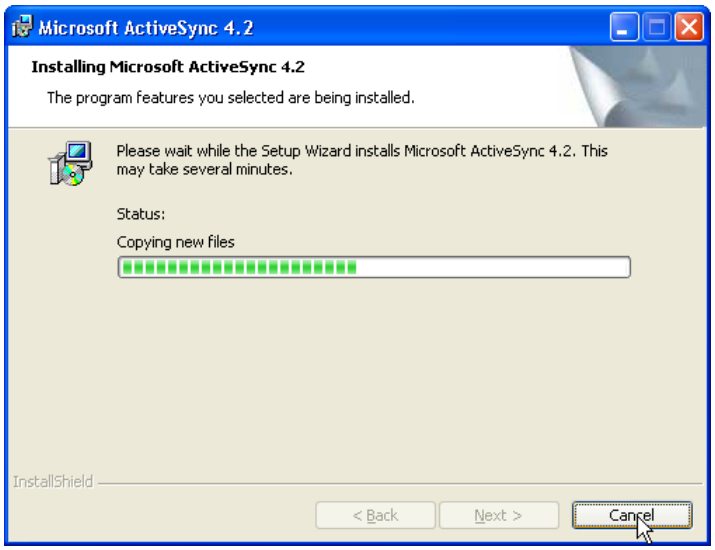
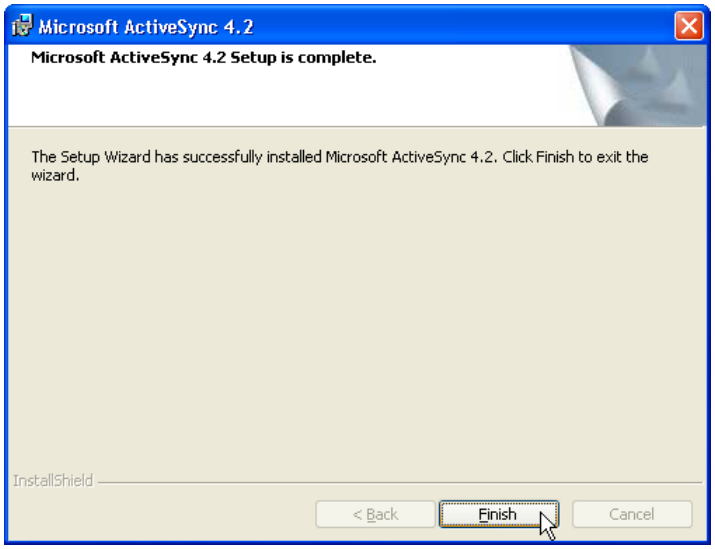
7. Select a drive to install the program and click **Next**.
   The installation wizard has gathered the information it needs to install Active-Sync and prompts you to begin the installation.



8. Click **Install**.
   The program begin the installation.


Microsoft ActiveSync 4.2
Installing Microsoft ActiveSync 4.2
The program features you selected are being installed.
Please wait while the Setup Wizard installs Microsoft ActiveSync 4.2. This may take several minutes.
Status:
Copying new files
InstallShield
< Back
Next >
Cancel

After the program has finished installing you see the following screen.


Microsoft ActiveSync 4.2
Microsoft ActiveSync 4.2 Setup is complete.
The Setup Wizard has successfully installed Microsoft ActiveSync 4.2. Click Finish to exit the wizard.
InstallShield
< Back
Finish
Cancel

9. Click **Finish**.

   You may be prompted to restart your computer.

After you have installed ActiveSync and restarted your computer, the ActiveSync icon appears in your computer's system tray as shown and ActiveSync Connection Wizard starts. For detailed information on how to use ActiveSync on your computer, start ActiveSync then click **Help** → **Microsoft ActiveSync Help**.

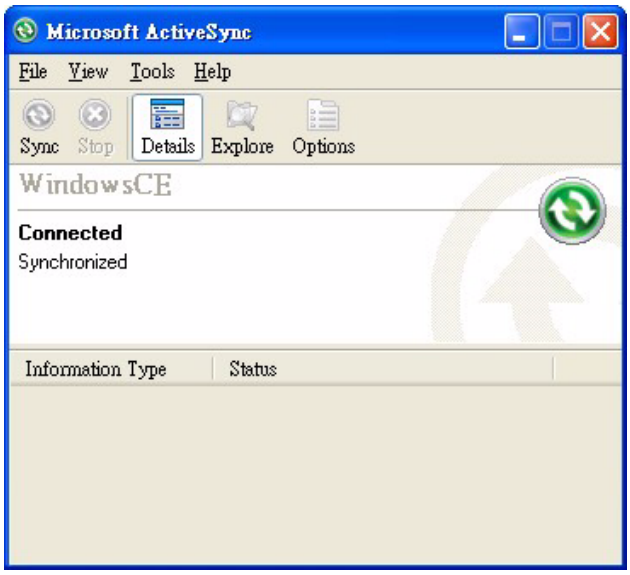
Connecting the Device to Your Computer

1. After ActiveSync has been installed, connect the USB charging cable to the universal connector on the bottom of your device. If necessary, connect an adapter. See *Connecting the PA600 to a PC* on page 10.
2. Plug the other end of the USB charging cable into a USB port on your computer.
3. Turn the device on.
4. ActiveSync starts automatically and configure the USB port to work with the PA600. The New Partnership setup wizard will automatically start.

NOTE: If ActiveSync doesn't start automatically, click **Start** → **Programs** → **Microsoft ActiveSync** on your computer.

If a message appears indicating that it is unable to detect a connection, click the **Cancel** button and manually configure the communication settings.

5. Follow the onscreen instructions.
6. When the configuration process is complete, the ActiveSync window appears.



7. Synchronization will be initialized and will take place if you've chosen to synchronize periodically or upon connection.

NOTE: Your computer can create a partnership with multiple PA600s. A PA600 can create a partnership with up to two computers.

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Synchronizing with Your Computer

Synchronization takes place according to the options you choose while setting up ActiveSync on your computer. If you accept the default (On Connect) synchronization option in the Microsoft ActiveSync Setup Wizard, you'll be able to simply connect your PA600 to your desktop computer and synchronization will take place.

If you have not enabled the On Connect feature in Active Sync, you can start Active-Sync in either of the following ways:

- On your computer, double-click My Computer → Mobile Devices folder.
- Connect the USB cable between the computer and PA600.

Connection options

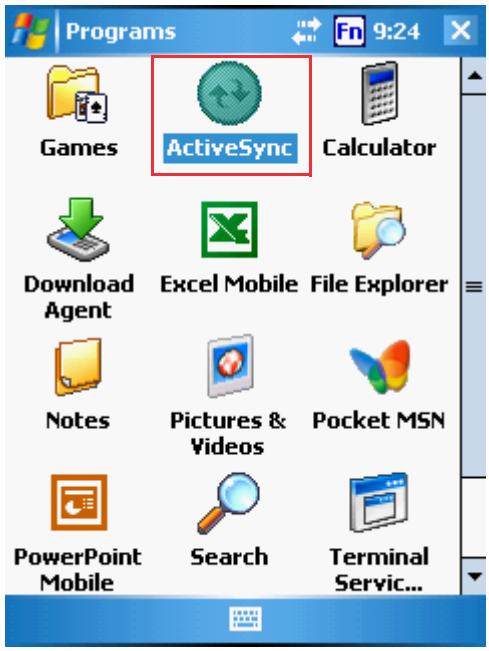
You can set remote synchronization with your computer using the following connection options:

- USB connection
- Bluetooth connection
- WiFi connection

USB Connection

To synchronize with your computer using a USB connection:

1. Open ActiveSync.
2. Connect your device to your computer using the USB charging cable.
3. Initiate connection by tapping **Start** → **Programs** → **ActiveSync**.
4. Tap **Menu** → **Connections**.
5. Select **Synchronize all PCs** using this connection check box.
6. Select a baud rate or cable type connection.
7. Tap **OK**.

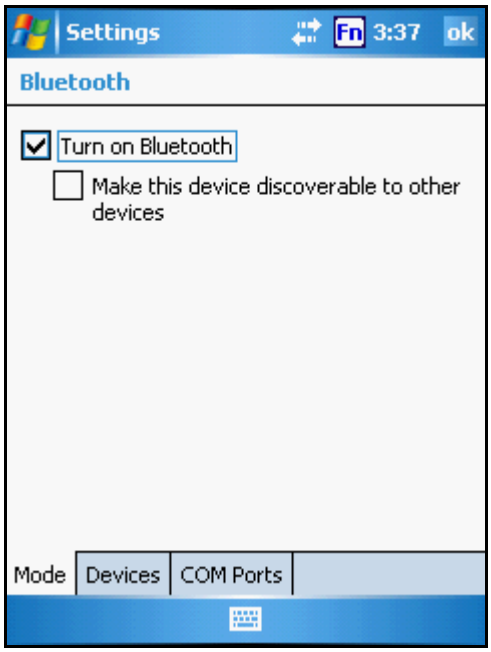


Bluetooth Connection

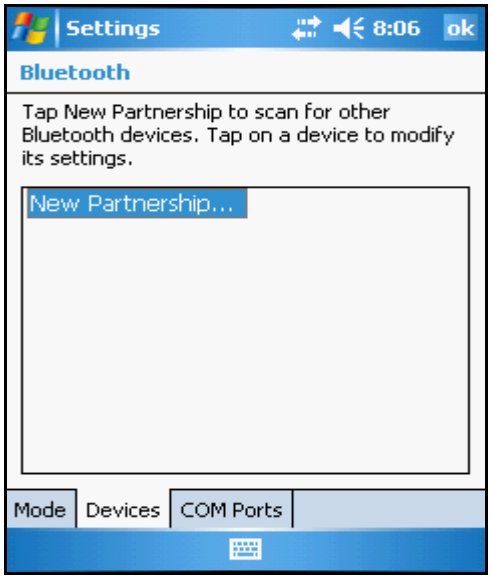
Your device is equipped with Bluetooth wireless technology that you can use to synchronize information with a computer equipped with a Bluetooth adapter or access point. Bluetooth wireless technology allows you to communicate with the computer whenever it is within range.

Follow these instructions to set up a Bluetooth connection.

1. Tap **Start** → **Settings** → **Connections** → **Bluetooth** → **Mode** and check **Turn on Bluetooth**.



2. Tap **Devices** → **New Partnership…**



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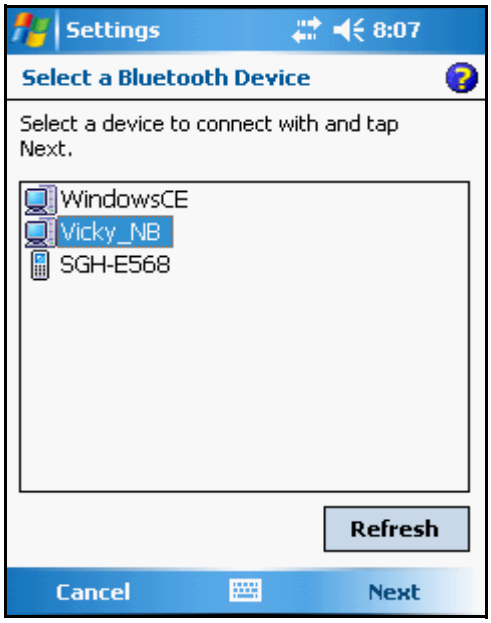
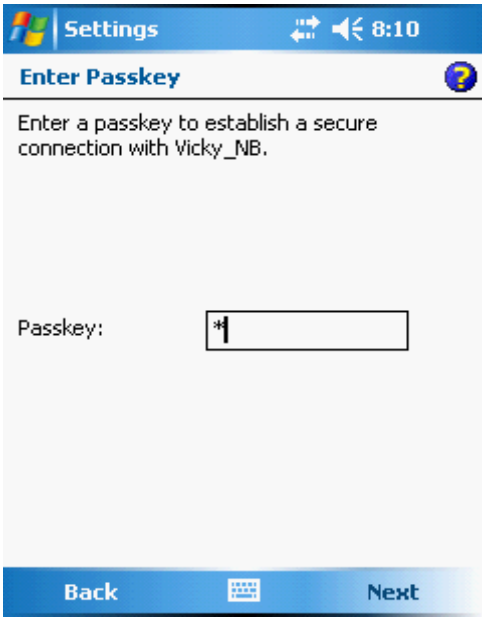
3. Select a device from the list and tap **Next**.



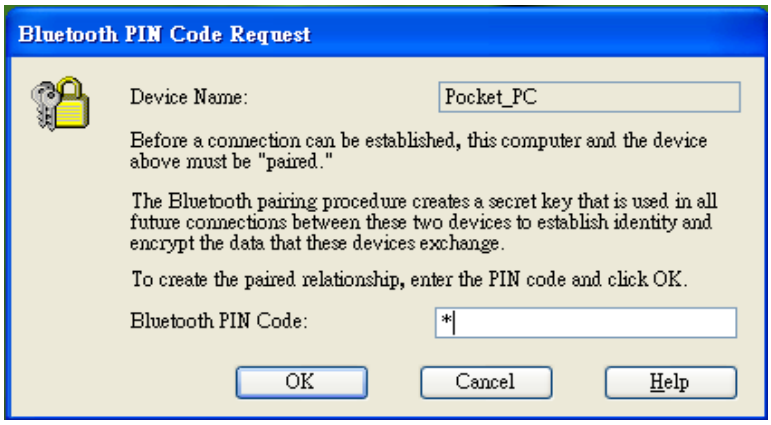
You are prompted for a passkey.

4. Enter the Passkey.



On the PC screen, you are prompted to enter the Bluetooth PIN Code Request.

5. Enter the same Bluetooth PIN Code you entered in step 4.


Bluetooth PIN Code Request
Device Name:
Pocket_PC
Before a connection can be established, this computer and the device above must be "paired."
The Bluetooth pairing procedure creates a secret key that is used in all future connections between these two devices to establish identity and encrypt the data that these devices exchange.
To create the paired relationship, enter the PIN code and click OK.
Bluetooth PIN Code:
OK
Cancel
Help

6. Select service. Check **Activesync**. Tap **Finish**.
7. To preserve battery power, be sure to end the bluetooth activesync connection when synchronizing is complete. Tap **OK**.
8. From Start > Program, double tap **Activesync**.

9. Tap **Menu** at the bottom right corner. Select **Connect via Bluetooth**. Terminal connects to the host via Bluetooth Activesync.

WiFi Connection

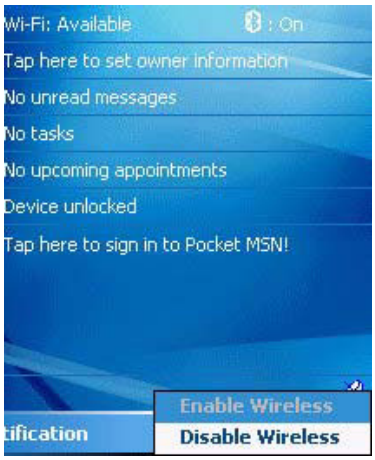
The terminal come with built-in RF functionality. After setting the network successfully, it will connect to the LAN network automatically. Suspend and warm start will always resume the auto reconnection.

Make the network setting.

(For PA600 Mobile)

1. Tap the RF icon at the bottom of the screen.

2. A selection menu pop up.
   Select “Enable Wireless”.



3. Once the RF card is detected, a dialog pop up.

4. Select a network SSID to connect to.
   Select one of the network. Tap **OK.**

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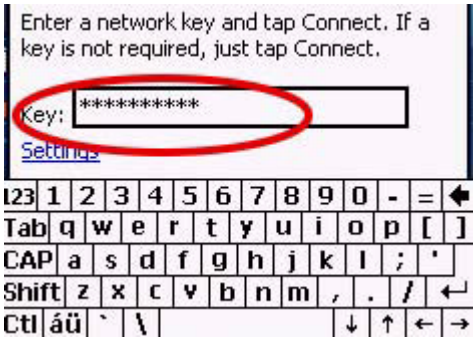
5. Select “The Internet”. Tap “Connect”.

6. Enter the network key.Tap “Connect”.



7. Icon turn to double arrow, indicate that the RF connection is running.

8. If you do not need the RF connection, you can repeat step 1 ~ 2 and select “Disable Wireless”.

Synchronizing Information

All files created on the device are stored in My Document/PA600 My Documents folder (if the designated device name is PA600). You can view files by double-clicking the PA600 My Documents icon on your computer.

If you have enabled file synchronization, your PA600 files are automatically synchronized in the My Documents folder on your computer, unless a different name was chosen for PA600.

Synchronization Options

Synchronization options can be modified, including when you synchronize and what gets synchronized. In the MS ActiveSync window, click **Tools** → **Options**.

For each type of information, the synchronization process can be hastened by limiting the amount of data to be synchronized. To do this, select a service and click the Settings button. After enabling a service, you must close and reopen the ActiveSync.

Using ActiveSync to Exchange Files

You can use ActiveSync to exchange information from your device to your computer and vice versa. Changes you made to the information on one location will not affect the information on the other one. If you want to automatically update information on both your device and computer, synchronize the information instead.

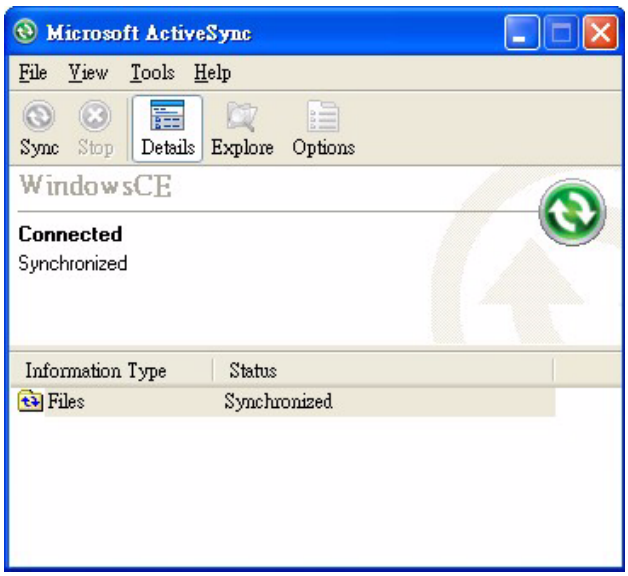
You can copy two types of information to your device: files and Pocket Access Windows Mobile Store information.

The procedure below only applies to copying files. Refer to the ActiveSync Help on your computer for instructions on how to copy Pocket Access Windows Mobile Store information.

NOTE: Files created on your computer may need to be converted by ActiveSync so that they can be viewed and edited on your device, and vice versa.

To copy files:

1. Connect your device to your computer.
2. In MS ActiveSync window on your computer, click **Explore**.



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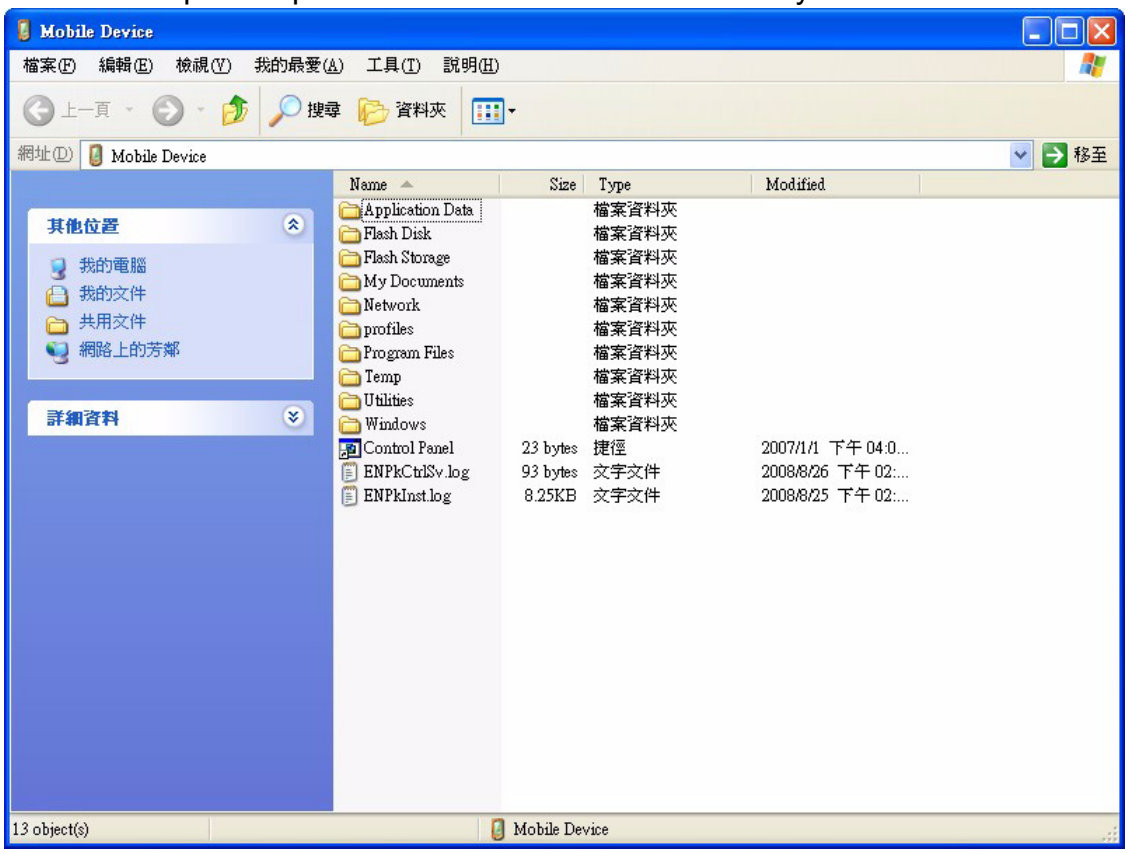
Windows Explorer opens the Mobile Device window for your device.



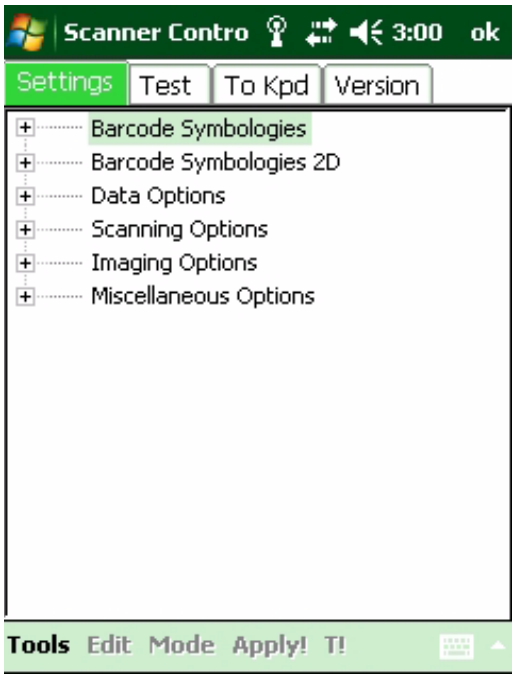
3. Locate the file that you want to copy on your device or computer.
4. Do either one of the following:
   – To copy the file to your device, right-click the file and click **Copy**. Place the cursor in the desired folder for your device, right-click, then click **Paste**.
   – To copy the file to your computer, right-click the file and click **Copy**. Place the cursor in the desired folder for your computer, right click, then click **Paste**.

Barcode Scanner Programs

Scanner Setting

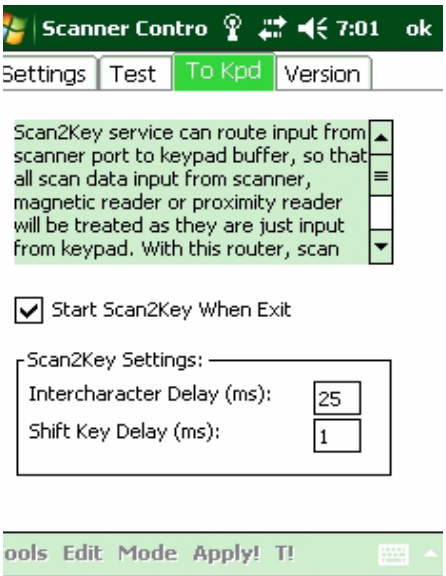
When it is necessary for the user to change the default barcode symbology for a different application, the Scanner Control Panel provides the ability to change default symbology, place delimiter characters behind scanned data, and save the settings.

Tap **Start** → **Settings** → **System** → **Scanner Settings** to display the Scanner Control Panel.



Scan2Key

The Scan2Key application routes input from a scanner port to a keypad buffer, making all input from the scanner emulate input from the keypad. Using Scan2Key, scanned data will be directed from the scanner port to any waiting(active/focused) text editor such as MS Mobile Word or a text box in an application.



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Barcode Symbologies (1D barcode)

Barcode Symbology	Enable/ Disable	Check Char/Digit verification	Transmit Check Char/digit	Max/Min Length	Other
Codabar	YES	YES	YES	YES	Transmit STSP, STSP Caps
Code 128	YES			YES	
Code 39	YES	YES	YES	YES	For ASCII, Transmit Start & Stop bits
Code 93	YES			YES	
EAN 128	YES			YES	Transmit GS
Interleaved 2 of 5	YES	YES	YES	YES	
JAN/EAN/UPC	YES		YES	YES	Transmit short check char/ digit, Transmit UPCA check char/digit, Transmit UPCA number, Transmit UPCE check char/digit, Transmit UPCE number, convert UPCE to UPCA, Zero expansion
RSS	YES			YES	RSS expanded, RSS stacked, RSS limited, RSS14, RSS14 stacked

Barcode Symbologies (2D barcode)

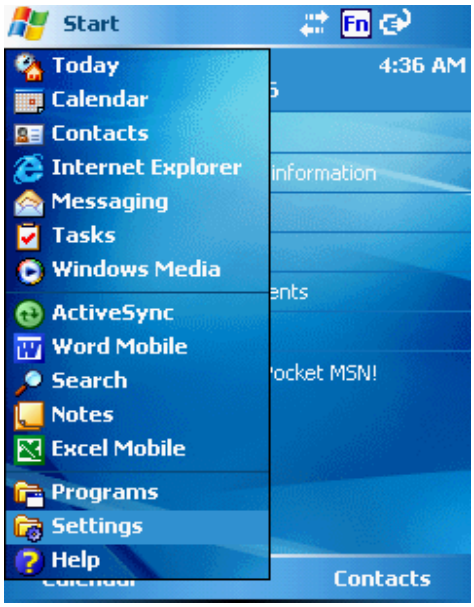
Barcode Symbology	Enable/ Disable	Check Char/Digit verification	Transmit Check Char/digit	Max/Min Length	Other
Composite	YES			YES	UPC composite, RSS composite, Only linear code, EAN 128 EM mode
Data Matrix	YES			YES	Rectangle, Negative
MaxiCode	YES			YES	Mode 0~ 5, Not only primary
PDF-417	YES			YES	
Postal Code	YES			YES	Australian post, Japan post, KIX, Planet, Postnet, Royal mail, UPU, USPS4CB, Decode Postnet with B and B' fields, Issue zero FCC Australia post codes
QR Code	YES			YES	Negative

Advanced Settings

Adjusting Settings

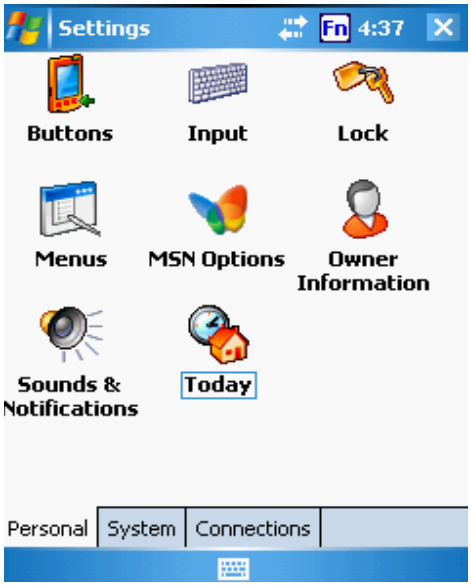
This section describes how to adjust the settings of your device to accommodate your work habits.

To access Settings, tap **Start** → **Settings**.



The Settings screen appears.

From here can adjust such user configurable items as the backlight, auto power off timer, system volume, and processor speed. You can also assign functions to buttons, configure menus, enter owner information, and set up connections.



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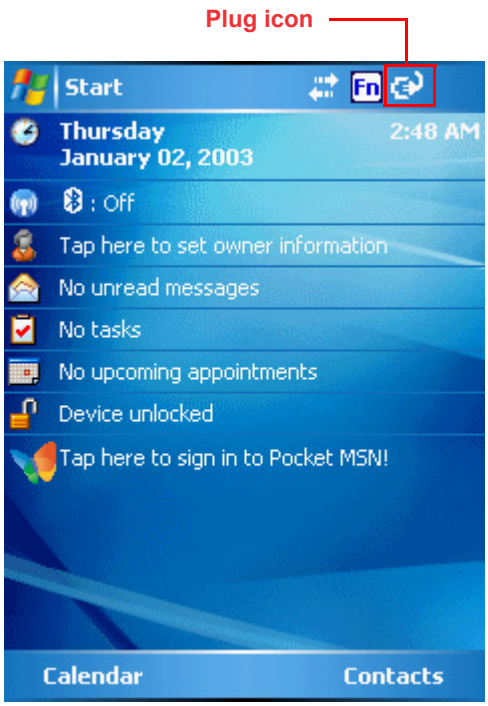
Checking Main and Backup Battery Status

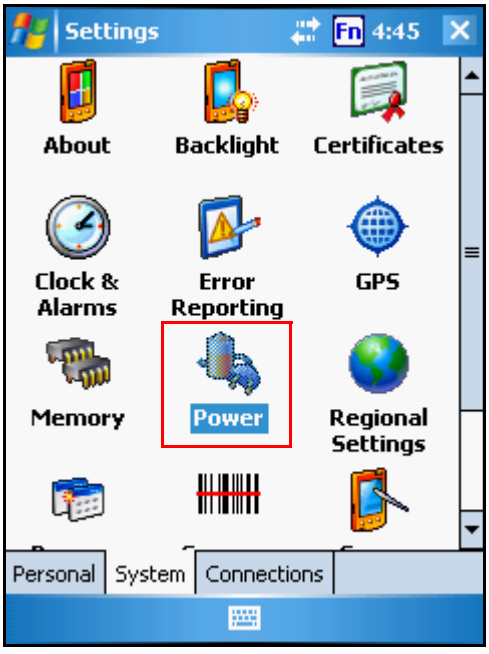
This section describes how to view the power level for both the main and backup battery. To minimize power consumption, you can define settings for the auto-off function and the processor's operation speed.

To check the main and backup battery status:

1. Open Power Properties. Do either of the following:
   - If the Plug or Battery icon appears on your device, double-tap the icon to bring the Power Properties screen.



   - Tap **Start** → **Settings** → **System** → **Power**.

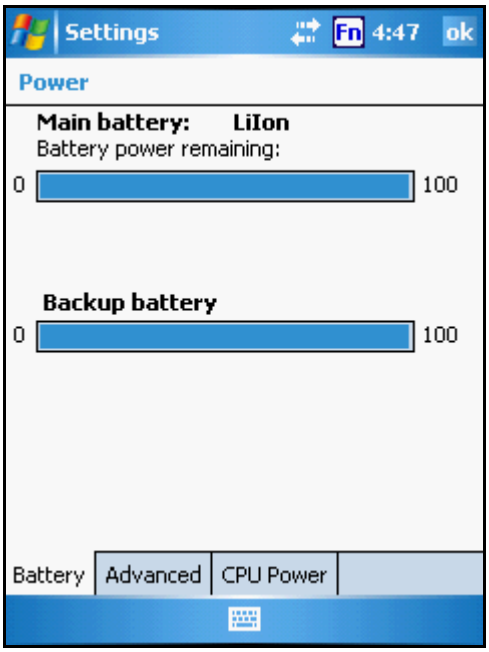


The Power screen appears.

2. The battery menu item displays the status of the main and backup batteries.

   On the screen shown here, both batteries are at almost 100% charge.

NOTE: It is necessary to charge the battery when the battery charge reaches below 10%. If the battery does not accept a charge, contact Unitech Technical Support.



Extending Battery Life

You can extend the PA600 battery life by doing either of the following:

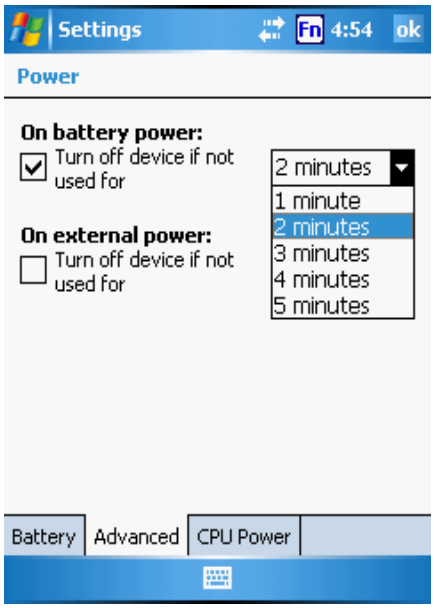
- Change the automatic power settings
- Minimize the use of backlight

Changing the Automatic Power Settings

The PA600 will enter idle mode when there is no task, or all tasks are waiting for input. In default setting, the PA600 automatically turns itself off if it remains idle for 3 minutes and when there is no external charging power connected. Pressing the power button returns the PA600 to the same point at the time of automatic shutdown.

To change the automatic power settings:

1. In the Power screen tap the **Advanced** tab.
2. Tap the automatic shut off time arrow to select from a list of time periods. The available time periods are 1, 2, 3, 4, and 5 minutes.
3. This function can also be activated when the PA600 is plugged into the power adapter or placed in its docking station by tapping the **On external power** check box and then tapping the arrow to select from a list of time periods. The available time periods are 1, 2, 5,10, 15 and 30 minutes.



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Adjusting Backlight Setting

The power consumption of the LCD backlight is high, turn off the backlight function if it is not necessary.

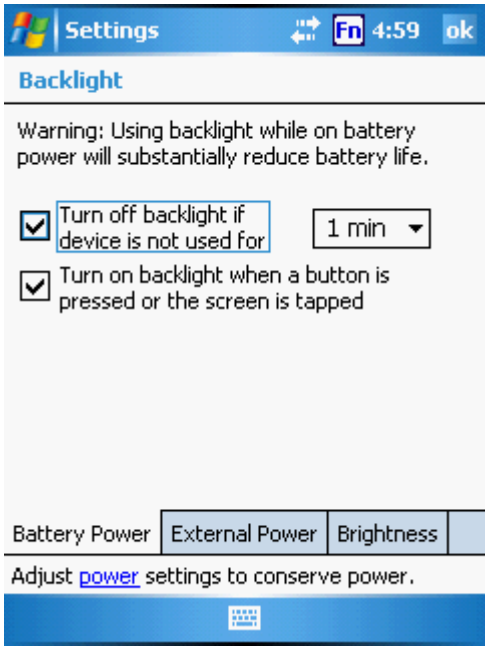
If a backlight is required, set “automatically turn off the backlight” function.

To change backlight settings:

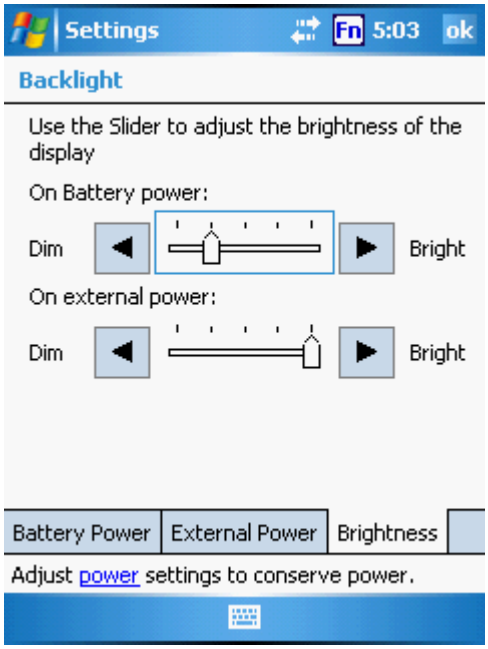
1. Tap **Start** → **Settings** → **System**.
2. Tap **Backlight**.

The Backlight screen appears.

3. Do any of the following:
   - In the Battery Power tab, tap the **Turn off backlight if device is not used for** check box and select the amount of time before the unit turns off the backlight while running in battery power mode from the drop-down list.
   - In the External Power tab, tap the **Turn off backlight if device is not used for** check box and select the amount of time before the unit turns off the backlight while running in battery power mode from the drop-down list.
   - Tap **Turn on the backlight when...** checkbox to activate the backlight when the screen is tapped or a key is pressed.


Settings
Fn 4:59
ok
Backlight
Warning: Using backlight while on battery power will substantially reduce battery life.
Turn off backlight if device is not used for
1 min
Turn on backlight when a button is pressed or the screen is tapped
Battery Power
External Power
Brightness
Adjust power settings to conserve power.

– In the Brightness tab, tap and drag the slider to choose a dimmer backlight when operating on battery power.



Viewing Flash Memory Files

Flash memory is rewritable location for programs and data files. The benefit of this feature is that files and programs saved in Flash Memory are unaffected by the PA600 power status.

To access the Flash Memory files:

1. On PA600, double tap **My Device**, double tap **Flash Storage** folder.

To transfer files to Device's Flash Memory:

1. Connect the device to your computer. See *Synchronizing with Your Computer* on page 27.
2. In MS ActiveSync window on your computer, click **Explore**. To copy the file to your device, right-click the file and click **Copy**. Place the cursor in the flash storage folder of your device, right-click, then click **Paste**.

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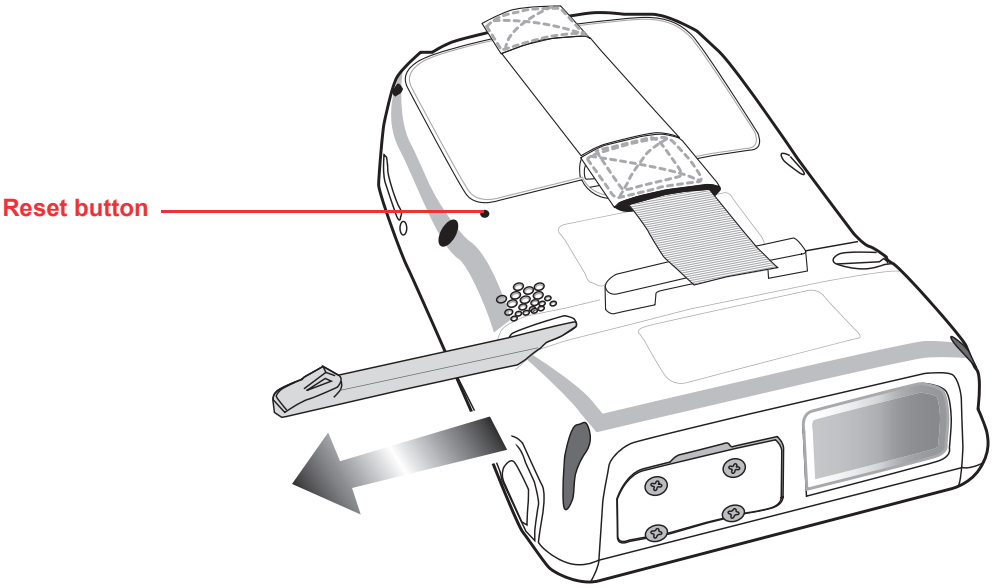
Performing a hardware reset

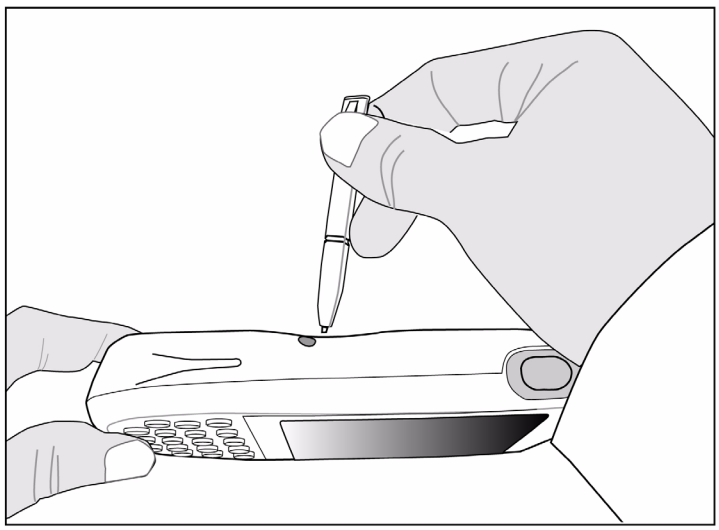
You may have to perform a reset if the device freezes (i.e., device no longer responds to the buttons or tapping on the screen).

Performing a Warm Boot

A warm boot allows your device to get a fresh start, similar to rebooting a computer. This will restart your device and adjust memory allocation. All records and entries are retained after a warm boot. Unsaved data in open programs may in some cases be lost.

1. Remove the stylus from its holder.
2. Lightly press the tip of the stylus to the reset button located on the rear of the PA600.



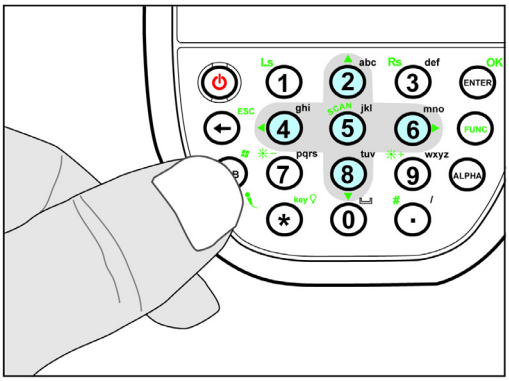


Performing a Cold Boot

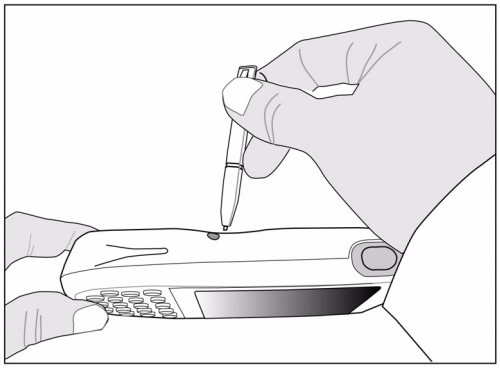
A cold boot will erase all data and all programs you have added and will restore the device to the default factory settings. However, data and application programs stored at the Flash Storage/Flash Disk will be not be deleted.

Never perform a cold boot unless a warm boot does not correct your problem. When you perform your next ActiveSync operation, you can restore any data that you previously synchronized to your computer or you can restore data that you backed up to a storage card.

1. Press and hold the Func key and TAB key.



2. While holding the Func key and TAB key, insert the tip of the stylus into the reset hole on the back of the PA600. Press and hold the reset button until you see the unitech splash logo screen. Wait 5 seconds and then release the Func key and TAB keys.



NOTE: When you perform a cold boot, the date and time settings will not be retained. Formats, preferences, and other settings are restored to their default factory settings.

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Appendix

System Specification

Processor / Memory	CPU	Intel PXA270 520MHz
	Memory	SDRAM:128MB Flash ROM:376MB
OS	Microsoft Windows Mobile 6.1 Professional	
Keypad	18-Key, including numeric key, alpha key and function key	
Display	240x320 QVGA, Color Transflective TFT, with Touch Screen & backlight	
Scanner	2D Imager	
RFID HF reader	HF 13.56MHz ISO 15693, ISO 14443A/B	
Indicator	Led, Vibrator	
Communication	USB Host & Client 802.11b/g Bluetooth 1.2 Bluetooth supports Bluetooth Printer, Bluetooth Modem, Bluetooth ActiveSync	
Audio	MIC, Speaker, Headset Connector, Receiver	
Expansion Slot	SDIO Slot	
Power Source	Main	3.7V 2200mAH Li-ion battery pack
	Backup	Rechargeable Ni-MH backup battery
Enclosure	Weight	310g with battery
	Dimension	L149.5 X H35.5 X W85mm
Environmental	Operating temperature	-10 C~ 50 C
	Storage temperature	-20 C~ 60 C
	Charging temperature	10 C~ 45 C
	Relative Humidity	5% ~ 95% (non-condensing)
	Drop test to Concrete	4 feet
	Environmental Sealing	IP64 Anti-microbial casting/protection
Certification	CE, FCC, NCC, VCCI, CCC, RoHS compliant	
Accessories	Battery Charger, Desktop Cradle, Modem Cradle, Multi-bay, Holster	
Software	unitech Software Development Kit Oracle Database Lite Wave Link Avalanche Microsoft BizTalk Server 2006 R2	